

COMMENTS ON PLANT SPECIES ADDED TO THE FLORA OF TEXAS FROM EL PASO COUNTY WITH MORE ADDITIONS

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ABSTRACT

Plant taxa recently added to the flora of Texas from El Paso County are listed and those for which little was published other than presence are discussed. New additions to the flora of Texas are *Malacothrix sonora* Davis & Raven and *Spartium junceum* L. Problematic locality data for records of *Mimulus rubellus* A. Gray and *Physalis acutifolia* (Miers) Sandwith are discussed and new records presented.

KEY WORDS: Texas, El Paso County, floristics

In the mid-1970's, an intense floristic survey was started for the Franklin Mountains, El Paso County, Texas, and surrounding areas. In the course of that survey, a number of species were added to the known flora of Texas (Correll & Johnston 1970) and others thought to be a part of the flora were documented for the first time. Some discoveries have been reported elsewhere and include the following (family acronym and reference given):

Telosiphonia brachysiphon (Torr.) Henr.
Baccharis sarothroides A. Gray
Filago californica Nutt.
Prenanthea exigua (A. Gray) Rydb.
Stylocline micropoides A. Gray
Arabis perennans S. Wats.
Brassica tournefortii Gouan.

Chorisporea tenella (Pallas) DC.
Diploaxis tenuifolia (L.) DC.
Lepidium latifolium
Sisymbrium orientale L.

APO Henrickson 1996
CMP Worthington 1990a
CMP Worthington 1990a
CMP Worthington 1990b
CMP Worthington 1990a, 1990b
CRU Rollins 1993a, 1993b
CRU Lemke & Worthington
1991; Rollins 1993a, 1993b
CRU Lipscomb 1984
CRU Spellenberg, *et al.* 1986
CRU Worthington 1990a
CRU Rollins 1993a, 1993b

Streptanthus carinatus Wright subsp. *arizonicus*

(S. Wats.) Kruckeberg, Rodman, &
Worthington

Mirabilis commata (Small) Standl.

CRU Kruckeberg, Rodman, &
Worthington 1982

NYC Turner 1993

Collections of the species added to the Texas flora and of those precisely documented for the first time have been deposited at UTEP and one or more of the following herbaria: TEX, SRSC, NY, and UCR. Johnston (1990) has noted most of these, mentioning them in his update, and Worthington (1989) has included most of them in his El Paso County checklist. However, details of the nature of the occurrences in Texas have not yet been reported for many of them. In this report the collection localities and other information about the species are presented and other species are reported for the first time.

APOCYNACEAE

TELOSIPHONIA BRACHYSIPHON (Torr.) Henr.

This species was recently found in the Franklin Mountains on a granite rock outcrop in a canyon bottom 1.1 air mi. NE from the top of Anthony's Nose (near 31° 58' 10" N, 106° 29' W), 4800 ft., 19 Jul 1995, *Worthington* 25068 (Henrickson 1996). This collection represents a significant range extension from extreme southwestern New Mexico. This population is restricted to crevices in an outcrop of granite rock measuring no more than 50 m square.

ASTERACEAE

HYMENOTHRIX WISLIZENII A. Gray

Turner (1962) cited an 1881 Vasey collection from the county that lacked specific locality data. Correll & Johnston (1970) state "not definitely known to occur in Texas . . . to be expected in the El Paso area." A significant population occurs on the east side of the Franklin Mountains at 4300 ft. elevation on igneous rock derived soils (generally near 31° 54' 15" N, 106° 27' 25" W), 11 Jun 1978, *Worthington* 2953, 08 Jul 1978, *Worthington* 3061. Another population was located at the Three Sisters Hills at 4100 ft. elevation on a mixed igneous and limestone alluvial substrate (near 31° 52' N, 106° 33' 30" W), 15 Sep 1988, *Worthington* 17406.

MALACOTHRIX SONORAE Davis & Raven

This species was collected in the Franklin Mountains 1.1 air mi. ENE from the top of North Franklin Mountain (near 31° 54' 13" N, 106° 28' 30" W), 5000 ft., in a steep-walled granite rock canyon, *Worthington* 24701. This is a significant range extension to Texas from the nearest known population in the Tres Hermanas Mountains, Luna County, New Mexico (Spellenberg *et al.* 1986).

BRASSICACEAE

ARABIS PERENNANS S. Wats.

This species of *Arabis* is now known from a number of localities on the east side of the Franklin Mountains mostly from igneous rock substrates (granite and rhyolite) or from mixed igneous and limestone alluvium at elevations of 4600-5500 ft. Specific localities are: 1.6 mi. WNW jct. Trans-Mountain Rd. with Gateway North-South (31° 54' 17" N, 106° 28' W), 11 Mar 1979, *Worthington* 3980; 1.1 air mi. NNE from the top of Anthony's Nose (31° 58' 26" N, 106° 29' 28" W), 4 Mar 1979, *Worthington* 3919; 1.5 air mi. NNE from the top of Anthony's Nose (31° 58' 45" N, 106° 29' 25" W), 4 Mar 1979, *Worthington* 3920; Mundy's Spring (31° 55' 10" N, 106° 29' 15" W), 10 May 1981, *Worthington* 7036; 0.1 mi. E of McKelligon Canyon Theatre parking lot, 19 Mar 1978, *Worthington* 2287.

SISYMBRIUM ORIENTALE L.

This species has become established on disturbed sites on the west side of El Paso. It has been found in the spring on scraped lots, roadsides, and dumped dirt at 4000-4100 ft. elev. (El Paso at the corner of Ressler and Escondido, Mar 1980, *Worthington* s.n.; lot on the NW side of El Paso, 9 May 1985, *Worthington* 13101; El Paso at the Three Sisters Hills, 19 Apr 1992, *Worthington* 20561).

CRASSULACEAE

SEDUM COCKERELLII Britt.

Uhl (1972) reports that the species occurs in the Davis Mountains in Madera Canyon at 5800 ft. and gives a chromosome count of $n = 15$. One collection made by the author from above Limpia Creek east of Mt. Livermore was sent to the late Robert J. Clausen as a live specimen and was confirmed to be this species. Presumably, the species has been collected many times in the Davis Mountains, but not prepared in a

way that makes determination certain. One collection from the Franklin Mountains is also this species (0.5 air mi. NE from top of North Franklin Mountain, 6600 ft., N-facing metamorphic rock cliff, 13 Oct 1984, *Worthington 12748*).

FABACEAE

LOTUS HUMISTRATUS Greene

This winter annual occurs on the east side of the Franklin Mountains on granite derived soils (0.9 air mi. WNW jct. Trans-Mountain Rd. with Gateway North/South (31° 54' 13" N, 106° 27' 22" W), 4300 ft. elev., *Worthington 4182*.

SPARTIUM JUNCEUM L.

This ornamental shrub, native to Europe, is now widely cultivated in El Paso County and probably elsewhere in Texas. It commonly escapes from cultivation and becomes established on vacant lots, roadsides, and arroyos. One voucher collection is from the 5400 block of North Mesa in El Paso, where it was found growing on a scraped lot (*Worthington 19254*, 8 May 1991).

PORTULACACEAE

TALINUM LONGIPES Woot. & Standl.

This species has been collected several times at high elevations (6250-6400 ft.) on North Franklin Mountain (0.7 mi. NW from the top of North Franklin Mtn., 10 Sep 1978, *Worthington 3464*; 0.5 mi. NE of the top of North Franklin Mtn., 27 Aug 1988, *Worthington 17079*).

SCROPHULARIACEAE

MIMULUS RUBELLUS A. Gray

Correll & Johnston (1970) include this species in the flora of Texas stating that it occurs in "moist and wet places in extreme west Texas." The basis for the inclusion appears to be the mentioning of the collection made by Thurber (# 135) in the "Hueco Mountains" in the original description (Torrey 1858). Unfortunately, the data on the Thurber collection do not give a specific locality or even mention the state in which it was collected. It is most likely that Thurber made this collection on igneous substrate in the Texas part of the Hueco Mountains, but the possibility exists that it was

collected in New Mexico. Two recent collections of this taxon in the Franklin Mountains of El Paso County, document this species as part of the Texas flora. The first collection was from 0.7 air mi. NNW from the top of North Franklin Mountain on fine talus at 6000 ft., (31° 54' 45" N, 106° 29' 50" W), 13 May 1995, *Worthington* 24760. The second was found 0.7 mi. SE from the top of North Franklin Mountain (near 31° 53' 50" N, 106° 29' W), about 5900 ft., also on finer grain igneous talus, *Worthington* 24829.

SOLANACEAE

PHYSALIS ACUTIFOLIA (Miers) Sandwith

Gray (1875) described *Physalis wrightii* A. Gray, now considered a synonym of *P. acutifolia*, from a collection made by Charles Wright (# 1602), allegedly from "prairies along the San Pedro River, southwestern Texas." Waterfall (1958) in his monograph of *Physalis*, accepted the data on the label of the type as correct, but found no additional Texas collections, and cited only "recent" collections from California and Arizona. Correll & Johnston (1970) followed Waterfall, noting that the species was known from Texas, but only from the one early collection.

Apparently the label on the type collection is in error due to the fact that Wright collected along two San Pedro Rivers. Early in his trip, Wright collected along the Devil's River in Texas, at that time known as the San Pedro River (Hartmann 1992). Late in his trip, he traveled to the San Pedro River in Arizona, where he actually collected the type of *Physalis wrightii* S of Benson. Additional evidence to this error is the high Wright collection number, the later years on the label (1851-1852), and the mention of "prairie" which is absent from the Devil's River in Texas.

The species has been collected twice recently in El Paso County (Three Sisters Hills near 31° 52' N, 106° 33' 30" W, 4100 ft., arroyo of mixed igneous and limestone alluvium, 4 Sep 1988, *Worthington* 17196; 0.3 mi. W of the Borderland Bridge across the Rio Grande at 31° 53' 15" N, 106° 36' W, 3760 ft., 27 Aug 1978, irrigation ditch along field, *Worthington* 3239). West of El Paso this species is often an abundant weed in old fields. Nesom (pers. comm.) searched the collection at TEX and found one sheet from Cameron County that appears referable to the species, but is worthy of a closer look (*Runyon* 4243, 11 Jul 1943).

ZYGOPHYLLACEAE

ZYGOPHYLLUM FABAGO L.

Johnston (1990) references D.M. Porter (pers. comm., 1980) to the occurrence of this species as an adventive weed in El Paso County. Hatch, *et al.* (1990) state its

occurrence in the Trans-Pecos is doubtful. The species occurs along the Rio Grande levee road 0.7 road miles WNW of the Vinton Road bridge (SW of Anthony) in the extreme western tip of Texas and El Paso County (*Worthington* 4733, 4 Jul 1979; *Worthington* 5889, 4 May 1980).

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